



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

5 Applicant: Shih-Sheng Huang  
Filing Date: 07/04/2002 Art Unit: 2673  
Serial No.: 10/064,357 Docket No.: PMXP0142USA

Title: WIRELESS PERIPHERALS CHARGED BY ELECTROMAGNETIC  
10 INDUCTION

To: The Commissioner of Patents  
P.O. BOX 1450  
Alexandria, VA 22313-1450

15 Subject: Information disclosure statement Under  
37C.F.R. §1.56.

Dear Sir:

20 This is an Information Disclosure Statement in  
accordance with the duty to disclose information material  
to patentability under 37 C.F.R. §1.56. The applicant wishes  
to make of record the items listed on the accompanying form  
25 PTO/SB/08. It is respectfully requested that the examiner  
initials the cited reference on the form and that it be made  
of record in the application and that a copy of the initialed  
form be sent to the applicant with the next communication  
from the examiner.

30 Since the IDS is filed before the mailing date of a first  
Office action on the merits, consideration of the

information disclosure statement is hereby requested according to 37C.F.R. §1.97(b). The prior art patent contained in the information disclosure statement was mailed from the State Intellectual Property Office of  
5 People's Republic of China on June 25, 2004 for a counterpart Chinese application. Applicant sincerely hopes that the examiner can consider the item contained in the information disclosure statement.

10 According to the requirement set forth in 37 C.F.R. §1.98 and M.P.E.P. 609, applicant is submitting a copy of the cited reference (China Patent No.1049077C) and a concise explanation of the relevance in this application hereinafter.

15 CN No.1049077C provides a wireless mouse 30 and an induction charging device 40. As shown in Fig.4, the wireless mouse 30 has an induction coil 21. The induction charging device 40 has an induction coil 14. Therefore the  
20 wireless mouse 30 can be charged by the induction charging device 40 via magnetic flux generated by the induction coil 14. Further in Fig.4, four flanges protruding the base of the induction charging device 40 bound the wireless mouse 30 to align the induction coil 21 of the wireless mouse 30  
25 with the induction coil 14 of the induction charging device 40.

The currently amended claim 1 is repeated below and compared to the cited patent to illustrate that the currently  
30 amended claim 1 is not anticipated by the cited patent.

1. A wireless pointing device for a computer, the

wireless pointing device capable of being charged by an induction power device, the induction power device comprising:

a base with a flat-plate; and

5 a first induction coil installed corresponding to a position of the flat-plate for transforming an electrical power of a power source to an induction magnetic field; and

the wireless pointing device comprising:

10 a housing with a contact plane corresponding to the flat-plate;

a control key installed on the housing for generating a control signal corresponding to a user's control;

15 a signal module electrically connected to the control key for transmitting the control signal through radio waves;

a second induction coil installed inside the housing corresponding to a position of the contact plane for receiving the induction magnetic field through the contact plane in a magnetic induction manner, an effective cross-sectional area of the second induction coil being smaller than an effective cross-sectional area of the first induction coil;

25 a power module electrically connected to the second induction coil for transforming the induction magnetic field received by the second induction coil to a corresponding electrical power; and  
30 a storage module for storing the electrical power generated by the power module so that the

storage module is capable of providing the electrical power to the wireless pointing device;

5 wherein when the contact plane of the wireless pointing device is put on the flat-plate of the induction power device, the second induction coil of the wireless point device receives the induction magnetic field generated by the first induction coil so that the wireless pointing  
10 device is capable of being charged by the induction power device.

It is clear that in the currently amended claim 1, an effective cross-sectional area of the second induction  
15 coil is smaller than an effective cross-sectional area of the first induction coil. This limitation would enable a user to move the wireless pointing device while charging the wireless pointing device by electromagnetic induction.

20 Although Chinese Patent No.1049077C discloses the two induction coils, it fails to teach or suggest any method or device which would allow a user to move the wireless pointing device while charging the wireless pointing device. Therefore, the currently amended claim 1 is not anticipated by the cited  
25 patent. Since claims 2-6 are dependent on the currently amended claim 1, they should not be anticipated by the cited patent if the currently amended claim 1 is not anticipated by the cited patent.

30 The currently amended claim 7 is repeated below and compared to the cited patent to illustrate that the currently amended claim 7 is not anticipated by the cited patent.

7. A wireless earphone for a broadcast system, the broadcast system emitting a radio broadcast signal, the wireless earphone capable of being charged by an induction power device, the induction power device comprising:
- 5 a base with a flat-plate;  
a first induction coil installed corresponding to a position of the flat-plate for transforming an electrical power of a power source to an induction magnetic field; and
- 10 a first fixer installed inside the base;  
the wireless earphone comprising:  
a housing with a contact plane corresponding to the flat-plate;
- 15 a signal module for receiving the radio broadcast signal of the broadcast system and generating corresponding music signal;  
a loudspeaker electrically connected to the signal module for playing the music signal;
- 20 a second induction coil installed inside the housing corresponding to a position of the contact plane for receiving the induction magnetic field through the contact plane in a magnetic induction manner;
- 25 a second fixer installed inside the housing for aligning the first induction coil with the second induction coil;  
a power module electrically connected to the second induction coil for transforming the induction magnetic field received by the second induction coil to a corresponding electrical power; and
- 30

a storage module for storing the electrical power generated by the power module so that the storage module is capable of providing the electrical power to the wireless earphone;  
5 wherein when the contact plane of the wireless earphone is put on the flat-plate of the induction power device, the second induction coil of the wireless earphone receives the induction magnetic field generated by the first  
10 induction coil so that the wireless earphone is capable of being charged by the induction power device.

It is clear that in the currently amended claim 7, the  
15 induction power device comprises a first fixer installed inside the base. The wireless earphone comprises a second fixer installed inside the housing for aligning the first induction coil with the second induction coil. Since the first fixer is installed inside the base and  
20 the second fixer is installed inside the housing, the two fixers do not occupy any space outside the base and the housing. The advantage of not occupying any space outside the base and the housing is that the housing of the wireless earphone is not bounded by any  
25 flanges as shown in Fig.4 of the cited patent. Therefore wireless earphones **with various dimensions** can use the induction power device to charge electric power.

30 However in the cited patent, the housing of the mouse 30 is bounded by the flanges in Fig.4 of the cited patent. Therefore, devices with dimension beyond the

boundary defined by the flanges will not be able to use the induction power device to charge electric power. Thus the currently amended claim 7 is not anticipated by the cited patent. Since claims 9, 11-13 are dependent on the  
5 currently amended claim 7, they should not be anticipated by the cited patent if the currently amended claim 7 is not anticipated by the cited patent.

The new claim 14 is repeated below and compared to the  
10 cited patent to illustrate that the new claim 14 is not anticipated by the cited patent.

14. An electronic device comprising:

- a base with a surface;
- 15 an induction coil installed corresponding to a position of the surface; and
- a fixer installed inside the base for aligning the induction coil of the magnetoelectric device with an external induction coil.

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It is clear that in the new claim 14, the electronic device comprises a fixer installed inside the base. Since the fixer is installed inside the base, the fixer does not occupy any space outside the base. The advantage of  
25 not occupying any space outside the base is that when the electronic device is used as a charging device, this can be used to charge devices of various dimensions. At the same time, the fixer is inside the base, so the fixer can engage with an external fixer  
30 to align the induction coil of the electronic device with an external induction coil.



Conversely, if the electronic device acts as a device needs to be charged, the fixer inside the base can engage with an external fixer to align the induction coil of the electronic device with an  
5 external induction coil so that the electronic device can be charged by the external induction coil.

The cited patent, however, fails to teach or suggest a fixer inside the base of the induction power  
10 device. Its fixers are flanges protruding from the housing of the induction power device. Therefore, it can only be used to charge devices with dimensions bounded by the flanges.

15 Moreover, the cited patent also fails to teach or suggest a fixer inside the housing of the mouse. Therefore, the mouse has to rely on physical bounds provided by the induction power device such as the flanges of the induction power device to align the  
20 induction coil of the mouse with the induction coil of the induction power device. Otherwise the induction coil of the mouse can not be aligned with the induction coil of the induction power device.

25 It is therefore believed that the new claim 14 is not anticipated by the cited patent. Since the new claims 15-19 are dependent on the new claim 14, they should not be anticipated by the cited patent if the new claim 14 is not anticipated by the cited patent.

30

Respectfully Submitted,

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communication and I will return your call promptly.)